Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-8 (Previously Canceled).

9. (Previously Presented) A sensor device comprising *i* sensor elements of a first type and *j* additional sensor elements of a second type, the *i* sensor elements of the first type being connected in a circuitry (*n* x *m*) matrix array with *n* row conductors and *m* column conductors, where *i*, *j*, *n* and *m* are natural numbers other than zero and where $1 \leq i \leq n * m$,

wherein each of the *i* sensor elements of the first type is connected between one of said *n* row conductors and one of said *m* column conductors and wherein each of the *j* additional sensor elements of the second type is connected between two of the *n* row conductors.

10. (Currently Amended) A sensor device comprising *i* sensor elements of a first type and *k* additional sensor elements of a second type, the *i* sensor elements of the first type being connected in a circuitry (*n* x *m*) matrix array with *n* row conductors and *m* column conductors, where *i*, [[*j*]] k, *n* and *m* are natural numbers other than zero and where $1 \leq i \leq n * m$,

wherein each of the *i* sensor elements of the first type is connected between one of said *n* row conductors and one of said *m* column conductors and wherein each of the *k* additional sensor elements of the second type is connected between two of the *m* column conductors.

11. (Previously Presented) The sensor device according to claim 9, comprising *k* additional sensor elements of a second type, where *k* is a natural number other than zero, wherein each of the *k* additional sensor elements of the second type is connected between two of the *m* column conductors.

12. (Previously Presented) The sensor device according to claim 9, wherein $1 \leq j \leq \frac{n * (n-1)}{2}$.

13. (Currently Amended) The sensor device according to claim 10, wherein $1 \leq [[j]] \underline{k} \leq \frac{m * (m-1)}{2}$.

14. (Previously Presented) The sensor device according claim 9, wherein the sensor elements of the first type and the sensor elements of the second type are designed in such a way that they perform an identical function in the sensor device.

15. (Previously Presented) The sensor device according to claim 9, wherein at least one of the sensor elements of the second type is designed in such a way that the at least one sensor element of the second type performs a function in the sensor device which differs from the function performed by the sensor elements of the first type.

16. (Previously Presented) The sensor device according to claim 9, further comprising a device for interrogating a sensor device including n+m control devices which are connectable to the n row conductors and the m column conductors, each control device being individually switchable in such a way that in a first mode the control device operates as a driver cell for applying an electrical test voltage to the row or column conductor to be connected, and in a second mode the control device operates as a measuring transformer for processing the signal at the column or row conductor which is to be connected.

17. (Previously Presented) The sensor device according to claim 10, further comprising a device for interrogating a sensor device including n+m control devices which are connectable to the n row conductors and the m column conductors, each control device being individually switchable in such a way that in a first mode the control device operates as a driver cell for applying an electrical test voltage to the row or column conductor to be connected, and in a

second mode the control device operates as a measuring transformer for processing the signal at the column or row conductor which is to be connected.

18. (Previously Presented) The sensor device according claim 10, wherein the sensor elements of the first type and the sensor elements of the second type are designed in such a way that they perform an identical function in the sensor device.

19. (Previously Presented) The sensor device according to claim 10, wherein at least one of the sensor elements of the second type is designed in such a way that the at least one sensor element of the second type performs a function in the sensor device which differs from the function performed by the sensor elements of the first type.

20. (Previously Presented) The sensor device according to claim 11, wherein $1 \leq j \leq \frac{n * (n-1)}{2}$.

21. (New) The sensor device according to claim 11, wherein $1 \leq k \leq \frac{m * (m-1)}{2}$.

22. (Previously Presented) The sensor device according claim 11, wherein the sensor elements of the first type and the sensor elements of the second type are designed in such a way that they perform an identical function in the sensor device.

23. (Previously Presented) The sensor device according to claim 11, wherein at least one of the sensor elements of the second type is designed in such a way that the at least one sensor element of the second type performs a function in the sensor device which differs from the function performed by the sensor elements of the first type.